From:	PETERSON Jenn L
To:	Elizabeth Allen/R10/USEPA/US@EPA
Cc:	Burt Shephard/R10/USEPA/US@EPA; Chip Humphrey/R10/USEPA/US@EPA; Joe Goulet/R10/USEPA/US@EPA; POULSEN Mike
Subject:	RE: Portland Harbor Round 3 Fish Analysis and Compositing
Date:	01/10/2011 09:18 AM
Attachments:	2009-10-27_Draft RI_AppA4_Text.pdf

Thank you for replying Elizabeth. I have not been able to discuss this with Joe and Burt after your group discussion, and I appreciate your summary.

The section below you have provided on re-constituting the fish is different than what I eventually found in Appendix A4 (*Calculation of Whole-Body Concentrations for Round 3B Bass and Carp samples*), which I am attaching. Interestingly, these two presentations of the methodology within the same report (one on RI text and one in the HH risk assessment) appear to present conflicting methodology. Perhaps more of a problem is the text presented in the HH risk assessment, which does not appear to be correct. The finding that the same report presents two different methodologies begs the question of whether we are working with different datasets depending if we are looking at RI data or "SCRA" data for the risk assessment. It is unclear what was used in the BERA.

Jennifer

<<2009-10-27_Draft RI_AppA4_Text.pdf>>

-----Original Message-----
From: Allen.Elizabeth@epamail.epa.gov
[mailto:Allen.Elizabeth@epamail.epa.gov]
Sent: Friday, January 07, 2011 1:02 PM
To: PETERSON Jenn L
Cc: Shephard.Burt@epamail.epa.gov; Humphrey.Chip@epamail.epa.gov; Goulet.Joe@epamail.epa.gov; POULSEN Mike
Subject: Re: Portland Harbor Round 3 Fish Analysis and Compositing

Hi Jennifer,

I know that you've talked with Burt and Joe about his, so my information

may be worth a little less than $0.02. The method for combining fillet

and body without fillet data is described (in something less than

understandable detail) in Section 2.6.1 of Attachment F2 to the BHHRA.

Table 3-11 presents the results of the fillet and combined samples, though the presentation is by river mile only. Without a better scorecard, and the results of the body minus fillet results (not shown in Table 3-11), it isn't possible to ascertain which river mile samples are represented by this technique, or to verify any of the calculations.

The specific data may be presented somewhere in one of the RI appendices, but the risk assessment itself provides no road map to that information. This specific calculation appears to have been done solely on a mass-weighted basis, though clearly no one here has actually verified any of the calculations. Something else to add to the to-do list.

Burt, Joe and I had a long discussion with the Region 10 QA Manager, Ginna Grepo-Grove, regarding this analysis. The aforementioned Section 2.6.1 does outline the specific data rules used for Portland Harbor.

There are no specific laboratory techniques specified other than good laboratory practice and whatever is required for handling any of the fish samples, and Ginna agreed with Burt's and my assumptions that variability due to fluid loss or other handling issues during the

process is likely within the limits of analytical precision, and

ultimately certainly within risk assessment precision. Ginna thought it

was described in the 2000 Fish Advisory Guidance, but I can't find it

anywhere in the 4 volumes. Lon informs me that this was also done for

the Lower Duwamish risk assessment, and also didn't think it was in the

advisory guidance. I'd suggest it's an overstatement to say that Region

10 is recommending this process. Rather, it's been allowed. I think

that while others may look at sites like Portland Harbor or the Lower

Duwamish as models because of their high profile and all the resources,

in reality because of the constant back-and-forth between the PRPs and

regulatory agencies, they might just as well serve as a warning to

others. If this sampling process continues to be done on sites here, it

appears that we will need to get a better handle on it and require at

least some minimal QA/QC procedures. It appears the consensus

preference the same as yours, but that may be a losing battle.

If anyone wants to chime in with an alternate viewpoint, please do so...

Elizabeth

Elizabeth Allen

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From: "PETERSON Jenn L" <PETERSON.Jenn@deq.state.or.us>

To: Burt Shephard/R10/USEPA/US@EPA, Joe Goulet/R10/USEPA/US@EPA,

Elizabeth Allen/R10/USEPA/US@EPA, Chip

Humphrey/R10/USEPA/US@EPA

Date: 01/03/2011 09:19 AM

Subject: Portland Harbor Round 3 Fish Analysis and Compositing

Hi EPA Portland Harbor – I have a question I am hoping you can help me

with.

No Round 3 fish were analyzed as true whole body samples. Instead, they

were analyzed as fillet and body without fillet, and then mathematically

re-combined to a “whole body concentration”. I am reviewing this method

for a site here in Oregon, and while they are constantly citing Portland

Harbor as reasoning to go forward with this sampling at our site, I

couldn't find a good record of methodologies used in Portland Harbor

outlining how this was done. I did find an e-mail (below) from Dana

asking if anyone had reviewed their calculations and methodologies, but

could find no response. The questions I have are:

1. Is the equation for re-combining sound? It sounds like

they did an organic carbon weighted basis, but I thought you had

to also consider mass. Where is this equation and methodology

presented? I could find no document describing the equation or

methodologies used by the LWG – if this exists could you point me

to the right place?

2. What are the data rules for combining two different

analytical results (fillet and body without fillet) to obtain the

recombined whole body estimate? What data rules were used in PH?

3. What were the laboratory techniques used to minimize loss

during the filleting and handling of the different parts to ensure

an accurate whole body estimate?

4. Is this methodology something you are recommending on other sites? I have to admit that I am not a fan, and would rather get true whole body samples, and collect additional fish to get the fillets. While I think it can be done under certain circumstances where fish availability is low, I think does not have its own uncertainties. The fact that there is no protocol anywhere for this methodology (homogenization, analytical, data rules, and recombining equation), and is not being used nationally as far as I can tell with the exception of Region 10 (Windward projects) does not increase the comfort level. If Region 10 is recommending the methodology, is there someone in particular I can discuss the issues above with?

Thank you, and I hope you all had a great holiday break!

Jennifer

From: Davoli.Dana@epamail.epa.gov [mailto:Davoli.Dana@epamail.epa.gov]

Sent: Friday, December 04, 2009 1:11 PM

To: Shephard.Burt@epamail.epa.gov; Goulet.Joe@epamail.epa.gov; PETERSON Jenn L

Cc: POULSEN Mike; lavellejm@cdm.com

Subject: Round 3 Fish Data

Did any of you check the calculation that the LWG did on the Round 3

data to calculate whole body data? A part of the HHRA states,“Fillets

with skin and the remainder of body were analyzed separately in Round 3B

for smallmouth bass and common carp. Whole body concentrations were

calculated from these results on an organic carbon- weighted basis,

which provided the opportunity to compare concentrations of chemicals in

the fillet tissue with concentrations in the whole body tissue for the

same fish tissue sample.” I am not sure if I clearly understand how the

calculation was done.